



**SHEARMEC**  
**AUTOMATIC ELECTROMECHANICAL SHEAR MACHINE**  
 DIRECT AND RESIDUAL SHEAR TESTING

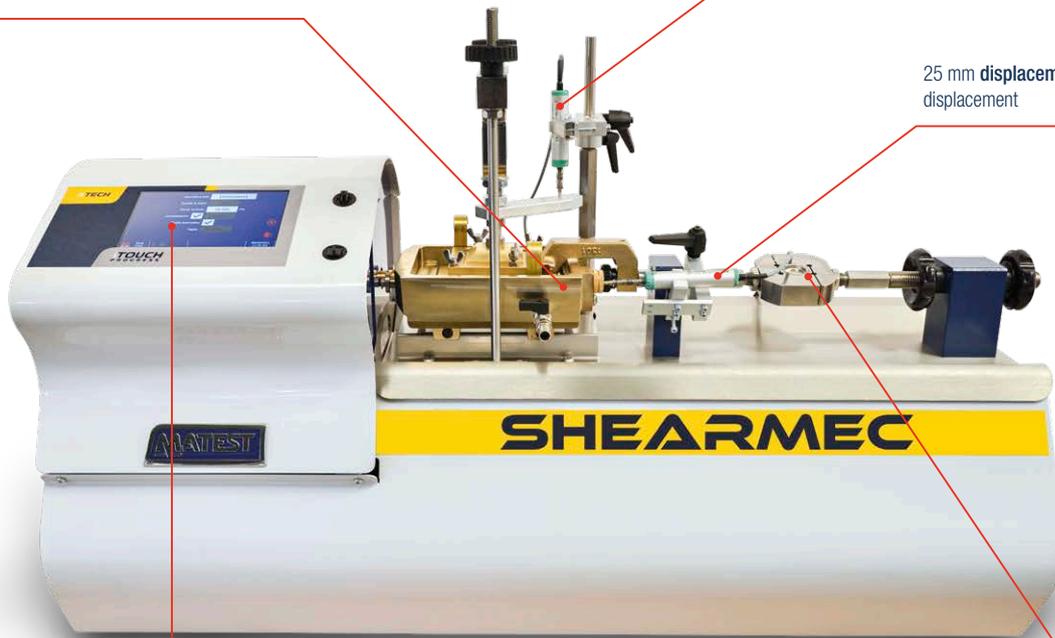
STANDARDS: UNI EN ISO 17892-10 | NF P94-071-1, P94-071-2 | AASTHO T236 | BS 1377:7  
 ASTM D3080-11

Shearmec is a machine designed to perform direct and residual shear tests in a fully automatic and reliable way, including consolidation phases, direct and residual shear. The machine adopts robust electromechanical servo-controlled actuators which ensure a precise application of vertical and horizontal loads. The user-friendly interface allows the entire test to be set up while eliminating or reducing need for manual intervention to perform both standardized tests or tests for research purposes.

Brass inner containers and shear boxes to guarantee durability over time

10 mm displacement transducer for vertical deformation

25 mm displacement transducer for horizontal displacement



7" display for test configuration and for data control

5 kN load cell

**MAIN FEATURES**

- High performances for both standardized tests and tests for research purposes.
- Cyber-Plus Progress controller with 8 channels for an accurate setting of the vertical load, thanks to an electromechanical actuator placed under the shear box.
- Automatic calculation of the shear speed in compliance with standards.
- Automatic load frame release for removal of the shear box.
- Connection to SmartLab software for data processing and for remote control.
- Possibility to perform tests 24/7.

**TECHNICAL SPECIFICATIONS**

- Maximum horizontal force: up to 5 kN
- Maximum travel: 20 mm
- Shear speed: from 0.00001 to 15.0000 mm/min
- Maximum vertical load: up to 12 kN

**Power supply:** 230V 1ph 50-60Hz 200W

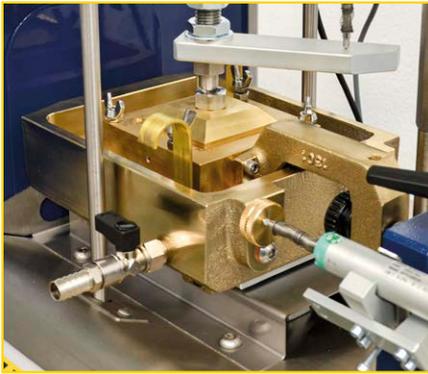
**Dimensions:** 1030x400x580 mm

**Weight:** 100 kg approx.

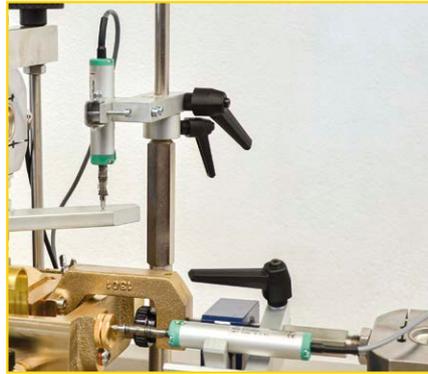
## SMARTLAB

SmartLab is a revolutionary software that interfaces Shearmec with laboratory management systems and regulates the shear test, as well as all the other geotechnical tests, from data acquisition to advanced and customizable data processing and to the creation of test reports.

## DETAILS MAKE THE DIFFERENCE



Squared and round shear boxes from 50 to 100 mm



Possibility to place displacement transducers with different capacities.



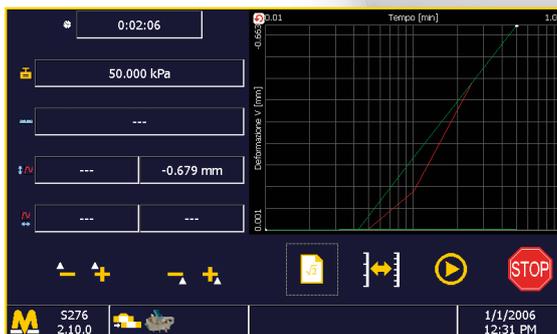
Quick release of the crossbeam to remove the shear box, optimizing assembly time.



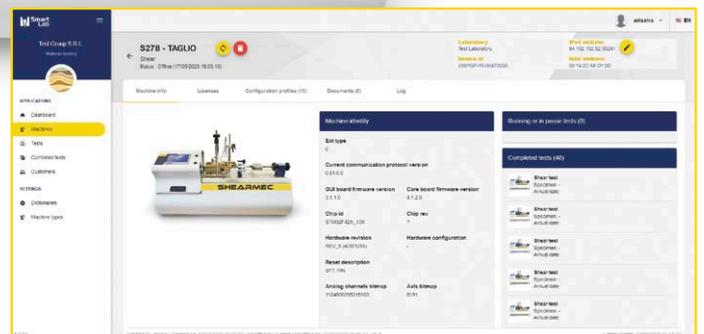
Possibility to place load cells with different capacities, in addition to 10 kN standard cell.



New electromechanical system to control the loading phases.



The test is entirely configurable by display and it shows test data for the entire duration of the test.



Possibility to connect the instrument to SMARTLAB software for remote control and data processing.